

AMENDMENTS TO THE DRAWINGS:

Attached herewith are two (2) corrected drawing sheets to be substituted for the corresponding drawing sheets presently on file in the above-identified application. The attached replacement drawing sheets include the changes to Figures 39-41. The replacement drawing sheets incorporate the changes required in reply to the Office Action dated June 22, 2005, and is not believed to add new matter to the original disclosure.

Attachments: Replacement Sheets

REMARKS

This application has been reviewed in light of the Office Action dated June 22, 2005. Claims 1 and 4 are presented for examination. Claims 1 and 4 have been amended to define still more clearly what Applicant regards as his invention. Claim 1 is in independent form. Favorable reconsideration is requested.

The specification has been amended to conform the Summary of Invention section to the amended claims.

An Information Disclosure Statement and a corresponding Form PTO-1449 was filed on March 25, 2002, as evidenced by the returned receipt postcard bearing the stamp of the Patent and Trademark Office, a copy of which is attached hereto. Applicant respectfully requests the Examiner to return an initialed copy of the Form PTO-1449, indicating the reference cited thereon was considered.

The Office Action objected to the drawings on the ground that Figures 39-41 should be designated by a legend such as -- Prior Art-. Applicants have carefully reviewed and amended those Figures to add a Prior Art legend, as suggested by the Examiner. It is believed that the objection to Figures 39-41 has been remedied, and its withdrawal is therefore respectfully requested.

Claim 1 was rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,809,768 (Merrill).

Claim 4 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Merrill, in view of U.S. Patent No. 5,760,852 (Wu).

As shown above, Applicant has amended independent Claim 1 in terms that

more clearly define what he regards as his invention. Applicant submits that this amended independent claim, together with the remaining claim dependent thereon, are patentably distinct from the cited prior art for at least the following reasons.

Claim 1 is directed to an image pickup apparatus, including: (1) an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes from different areas of an exit pupil of an imaging optical system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes; and (2) a plurality of pixel units each including a first sensitive area for outputting the first electric signal, and a second sensitive area for outputting the second electric signal. The first sensitive area and the second sensitive area overlap each other.

Among other notable features of Claim 1 are (1) an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes from different areas of an exit pupil of an imaging optical system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes, and (2) that the first sensitive area and the second sensitive area of each pixel unit overlap each other.

Merrill relates to a plurality of double slope MOS active pixel sensors. The pixel sensors of Merrill include two photodiodes 12 and 14, which have their anodes connected to ground potential. Merrill discusses the output voltage of the photodiodes as a function of the integrated light signals for the pixel sensor (see Figure 2). Merrill also discloses a digital camera employing the pixel sensors that has a prism 82 and a lens 86 which projects an image through a face 88 of the prism 82, thereby splitting the image into red, green and blue images which are each focused onto one of output faces 90, 92 and 94 of prism 82. Attached to the three output

faces are three chip-on-board assemblies including an array of pixel sensors.

However, Applicant submits that nothing has been found in Merrill that would teach or suggest “an output unit which outputs a first electric signal corresponding to a first light flux included in light fluxes from different areas of an exit pupil of an imaging optical system, and a second electric signal corresponding to a second light flux different from the first light flux, included in the light fluxes,” as recited in Claim 1. Further, nothing has been found in Merrill that would teach or suggest a pixel unit having a first sensitive area and a second sensitive area that overlap each other, as recited in Claim 1.

Accordingly, Applicant submits that Claim 1 is allowable over Merrill.

A review of the other art of record, including Wu, has failed to reveal anything which, in Applicant’s opinion, would remedy the deficiencies of the art discussed above, as a reference against Claim 1.

Claim 4 is dependent from independent Claim 1 discussed above and is therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, however, the individual reconsideration of Claim 4 on its own merits is respectfully requested.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "L.P. Diana", is written over a horizontal line.

Leonard P. Diana
Attorney for Applicant
Registration No.: 29,296

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

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